source, such as those listed above or a combination thereof, is supplied adjacent an edge of the substrate through purge gas inlet 510 of susceptor 12 at a flow rate of about 1 sccm to about 150 sccm, preferably about 100 sccm. In one aspect, it is contemplated that one or more carbon silicon gas sources may be used to advantage with the invention. The carbon silicon gas sources are supplied to the chamber through the manifold 11, or showerhead, and/or a purge gas inlet in the susceptor 12. In another aspect, it is contemplated that a self-oxidizing carbon silicon gas source eliminates the need for a separate oxidizer. In yet another aspect, it is contemplated that tetraetheyl orthosilicate (TEOS) may be delivered through the purge gas inlet in the susceptor 12 to increase the concentration of silicon oxide at the edge of the substrate.

<u>IN THE CLAIMS:</u>

Please cancel claims 23-24, and amend the claims as follows:

1. (Amended) A method for depositing a film on a substrate, comprising:

positioning a substrate in a chamber on a substrate support;

flowing a carrier gas into the chamber;

flowing a process gas mixture adjacent an edge of the substrate through a purge gas inlet in the substrate support;

generating a plasma;

delivering a first carbon silicon gas source to the chamber through another gas inlet; and

depositing a film on the substrate.

2. The method of claim 1, wherein the process gas mixture delivered to the edge of the substrate comprises an oxidizer and a carrier gas.

3. The method of claim 2, wherein the process gas mixture is delivered to the edge of the substrate through the purge gas inlet at a flow rate of about 1 sccm to about 150 sccm.

4. The method of claim 3, wherein the process gas mixture delivered to the edge of the substrate further comprises a second carbon silicon gas source.

5. The method of claim 4, wherein the first and second carbon silicon gas sources are selected from the group consisting of methylsilane, dimethylsilane, trimethylsilane, tetramethylsilane, disilanomethane, bis(methyl-silano)methane, 1,2-disilanoethane, 1,2-bis(methylsilano)ethane, 2,2-disilanopropane, 1,3,5-trisilano-2,4,6-trimethylene, 1,3-dimethyldisiloxane, 1,1,3,3-tetramethyldisiloxane, 1,3-bis(silanomethylene)di-siloxane, bis(1-methyldisiloxanyl)methane, 2,2-bis(1-methyl-disiloxanyl)propane, 2,4,6,8-tetramethylcyclotetrasiloxane (TMCTS), 2,4,6,8,10-pentamethylcyclopentasiloxane, 1,3,5,7-tetra-silano-2,6-dioxy-4,8-dimethylene, 2,4,6-trisilanetetrahydropyran, 2,5-disilanetetrahydrofuran, fluorinated carbon derivatives thereof, and combinations thereof.

6. The method of claim 5, wherein the carrier gases delivered to the edge of the substrate are selected from the group consisting of argon, helium, and combinations thereof.

7. The method of claim 6, wherein the oxidizer delivered to the edge of the substrate is selected from the group consisting of oxygen (O_2), carbon monoxide (CO), carbon dioxide (CO_2), water (H_2O), nitrous oxide (N_2O), and ozone (O_3).

8. The method of claim 3, wherein the process gas mixture delivered to the edge of the substrate further comprises tetraetheyl orthosilicate (TEOS).

9. The method of claim 7, wherein the first carbon silicon gas source is delivered to the chamber at a flow rate of about 500 sccm to about 1700 sccm.

10. The method of claim 7, wherein the substrate is maintained at a temperature of about 300ºC to about 400ºC.

11. The method of claim 10, wherein a chamber pressure is maintained from about 2 Torr to about 6 Torr.

12. The method of claim 11, further comprising:

supplying an RF power source to the chamber at a power level from about 100 W to about 1500 W.

13. The method of claim 12, further comprising:

flowing a second oxidizer into the chamber at a flow rate of about 150 sccm to about 800 sccm.

14. The method of claim 1, wherein the process gas mixture delivered to the edge of the substrate comprises a self-oxidizing carbon silicon gas source.

15. The method of claim 14, wherein the first carbon silicon gas source delivered to the chamber is self-oxidizing.

16. (Amended) A film produced by a process comprising:

positioning a substrate in a chamber on a substrate support;

flowing a carrier gas into the chamber;

flowing a process gas mixture adjacent an edge of the substrate through a purge gas inlet in the substrate support;

generating a plasma;

delivering a first carbon silicon gas source to the chamber through another gas inlet; and

depositing a film on the substrate.

17. The film of claim 16, wherein the film has a higher content of silicon oxide around the edge of the substrate.

18. The film of claim 16, wherein the film has a greater hardness around the edge of the substrate than an inner portion of the substrate.

19. The film of claim 17, wherein the film deposited on an inner portion of the substrate has a dielectric constant of less than about 3.

20. The film of claim 18, wherein the film has a greater dielectric constant around the edge of the substrate than the inner portion of the substrate.

21. The film of claim 19, wherein the film has a greater dielectric constant around the edge of the substrate than the inner portion of the substrate.

22. (Amended) The film of claim 16, wherein the carrier gas and the first carbon silicon gas source are delivered to the chamber through a showerhead.

23. (Canceled) A purge heater assembly, comprising:

a substrate support having a ceramic upper plate and a ceramic lower plate defining a channel therethrough;

one or more alignment pin holes disposed in an outside perimeter of the substrate support;

an annular purge gas inlet disposed around an outside edge of the upper plate;

a shadow ring having one or more alignment pin recesses disposed therein, wherein the upper plate and the shadow ring are machined to form a gap of a predetermined size; and

a ceramic shaft having an annular passage therethrough.

24. (Canceled) The apparatus of claim 23, further comprising one or more alignment pins disposed through the one or more alignment pin holes.